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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,575	10/17/2005	Claudio Lacagnina	07040.0215	9150

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EXAMINER	
KNABLE, GEOFFREY L	
ART UNIT	PAPER NUMBER
1791	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/529,575	LACAGNINA, CLAUDIO	
	Examiner	Art Unit	
	Geoffrey L. Knable	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *45-93* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *45-76 and 78-93* is/are rejected.

7)☒ Claim(s) *77* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/30/05; 8/1/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. Claim 65 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 65, it is not clear how the "unvulcanized tire structures" defined in line 2 relate to the "completed tire structures" defined in line 3. If they are the same, it would be clearer if consistent terminology were adopted.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 85-93 are rejected under 35 U.S.C. 102(b) as being anticipated by Okada et al. (US 2001/0002608).

Okada et al. discloses a tire building "station" (the term "completion station" is not read to distinguish either the entire building apparatus of fig. 1 or the individual parts 10 or 30 in figs. 7-8) including at least one supply member (80 or 110) as well as two handling units (e.g. 14/34 or 14a/14b or 34a/34b). Further, the handling units are each rotatable and further, by virtue of the carriages (12 and 32 in fig.1) or reversing units (16

or 36 in figs. 7-8), the handling units are also able to impart to a tire structure thereon a translatory movement relative to the supply members (even the movement by 16 or 36 would still seemingly provide at least a substantially translatory motion). A station as required by claim 85 is therefore anticipated. As to claims 86 and 91, at least two or three supplying members (80, 110) are present. As to claim 87, symmetrical supplying members are depicted. As to claim 88, the handling units (14a/14b; 34a/34b) are symmetrical. As to claims 89, 90, 92 and 93, supplying members operable at the same height (i.e. those operable at a given drum position) as well as at a higher height (for the two different drum height positions in fig. 8) are provided.

5. Claims 85-87 and 91 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 01/39963 to Caretta.

WO '963 discloses a completion station (e.g. station 9/10) comprising supply members (91, 92, 101, 102), two handling units (R6, R7) able to impart rotation and translation. A vertical plane can also be drawn between two supplying members. An apparatus consistent with these claims is therefore anticipated.

6. Claims 45, 48-65, 68-76 and 78-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. (US 2002/0088529) taken in view of at least one of [Holman (US 3,264,162), WO 01/39963 to Caretta and Taylor et al. (US 4,088,524)].

Ogawa et al. discloses a process for producing tires, comprising: sequentially producing incomplete tire structures in at least one assembly line by building a carcass including a carcass ply and beads in cylindrical form followed by shaping into toroidal shape (e.g. paragraphs [0039]-[0040]) and forming at least one constituent tire element

on the incomplete tire structure by laying down at least one continuous long element (e.g. tread in fig. 4). Specifics of the relative location of the toroidal carcass when the tread is applied are not however provided. Holman is directed to applying the tread/sidewall to a tire casing in the formation of new tires and in particular suggests bringing the casing to the device (completion station) for application of the tread by winding a long continuous strip. Taylor similarly teaches an apparatus for applying treads to new tire casings, the apparatus defining a completion station. WO '963 to Caretta suggests that the building of the tire can desirably be broken up into stations including handling units adapted to present the tire being built to the supply members in each station. Further, intermediate storage between stations (note holding positions 24, 25, etc.) are also taught. In view of these teachings, it would have been obvious to transfer the toroidal carcass of Ogawa et al. to a completion station for application on the strip. Given the separate device/station, it would have been obvious to include at least some intermediate storage, as typical between tire stages, to help accommodate differing production rates for only the expected and predicable results. Note also the inclusion of holding stations in WO '963 as already noted. A process as required by claim 45 would therefore have been obvious. A corresponding plant as required by claim 68 would also have been obvious, it being noted that Holman teaches including plural hubs or handling units that are rotatable as well as translatable relative to the supply. Likewise, Taylor et al. and WO '963 teach including plural handling units.

As to claims 48-51 and 72-73, Ogawa et al. discloses associating a belt ring formed and set in advance (formation on an auxiliary drum followed by transfer being

therefore implicit or certainly obvious) with the carcass (e.g. paragraph [0049]) - the particular order of association would have been readily and routinely selected for only the expected results. As to claim 52-55 and 69-71, Ogawa indicates that either the same carcass building drum or another shaping means can be used (note esp. paragraph [0040]) for the shaping. As to claim 56, any storage position can be designated a storage station. As to claims 57-58, support of the tire carcass during completion would have been provided. Such support can be designated a shaping or building drum, it being noted that claim 58 does not indicate that it is the same drum used for building and shaping. Note also that WO '963 would suggest maintaining the carcass on a building drum. As to claims 59-63, Ogawa et al. discloses forming the tread, sidewall, etc. by winding superimposed turns. Holman and WO '963 provide similar teachings. As to claim 64, WO' 963 suggests moving the incomplete carcass for application of the tread, etc. As to claims 65 and 74, unloading and intermediate storage prior to vulcanization is typical and obvious. As to claim 75-76 and 78, use of two symmetrical supplying members to be able to apply tire members simultaneously to both sides of the tire (e.g. two sidewalls, etc.) would have been obvious to enhance productivity. As to claim 79-82, a third supply means at a different height would have been obvious for space reasons given the limited room at a given station.

7. Claims 46, 47, 66, 67, 83 and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. (US 2002/0088529) taken in view of at least one of [Holman (US 3,264,162), WO 01/39963 to Caretta and Taylor et al. (US 4,088,524)] as applied above, and further in view of Okada et al. (US 2001/0002608).

As to claim 46, 47, 66, 67, 83 and 84, given that it is well known that different tire stages require different times for completion, it would have been obvious to optimize the number of each station (for simultaneous production) depending upon the expected production rate of each stage, any particular selection leading to only the expected and predictable results. Okada et al. is cited as evidence of this understanding that building can be divided into two lines/stations for simultaneous production (note esp. fig. 7 and paragraph [0075] suggesting the expected benefits on production efficiency). Note also WO '963 teaching simultaneously processing different tires for the expected productively advantages.

8. Claim 77 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The closest prior art would not teach or render obvious a plant as required by claim 68 with the additional requirements of claims 75-77 where the handling units are arranged symmetrical with respect to the same vertical plane of symmetry as that of the two supplying members.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Geoffrey L. Knable/
Primary Examiner, Art Unit 1791

G. Knable
September 28, 2008